File 411:DIALINDEX(R)

DIALINDEX(R)

(c) 1999 The Dialog Corporation plc

*** DIALINDEX search results display in an abbreviated ***

*** format unless you enter the SET DETAIL ON command. ***

?sf compsci,patents,35

>>> 349 does not exist

>>> 351 is unauthorized

>>> 352 is unauthorized

>>> 353 is unauthorized

>>>4 of the specified files are not available

You have 36 files in your file list.

(To see banners, use SHOW FILES command)

?s (computerized or custom?)(w)cards and (internet or world(w)wide(w)web) and print? and translat?

Your SELECT statement is:

s (computerized or custom?)(w)cards and (internet or world(w)wide(w)web) and print? and translat?

Items File

- 2 275: Gale Group Computer DB(TM)_1983-1999/Nov 19
- 3 654: US Pat.Full. 1990-1999/Nov 16

2 files have one or more items; file list includes 36 files.

?begin 275,654

19nov99 09:24:49 User219455 Session D603.2

\$1.97 1.578 DialUnits File411

\$1.97 Estimated cost File411

\$0.20 TYMNET

\$2.17 Estimated cost this search

\$2.36 Estimated total session cost 1.632 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 275: Gale Group Computer DB(TM) 1983-1999/Nov 19

(c) 1999 The Gale Group

File 654:US Pat.Full. 1990-1999/Nov 16

(c) format only 1999 The Dialog Corp.

*File 654: Reassignment data current through 07/09/99.

Set Items Description

?s (computerized or custom?)(w)cards and (internet or world(w)wide(w)web) and print? and translat?

18589 COMPUTERIZED

316736 CUSTOM?

77147 CARDS

104 (COMPUTERIZED OR CUSTOM?)(W)CARDS

134293 INTERNET

175423 WORLD

382126 WIDE

153971 WEB

28434 WORLD(W)WIDE(W)WEB 282374 PRINT? 126099 TRANSLAT?

5 (COMPUTERIZED OR CUSTOM?)(W)CARDS AND (INTERNET OR WORLD(W)WIDE(W)WEB) AND PRINT? AND TRANSLAT?

?t 1/2,ab/1-5

1/2,AB/1 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 1999 The Gale Group. All rts. reserv.

02290118 SUPPLIER NUMBER: 54442413 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Fourth-Grade Fever.(four children's educational software packages)(Software
Review)(Evaluation)
Brooks, Susan
Technology & Learning, 19, 8, 10(1)
April, 1999
DOCUMENT TYPE: Evaluation ISSN: 1053-6728 LANGUAGE: English

RECORD TYPE: Fulltext; Abstract
WORD COUNT: 1768 LINE COUNT: 00250

ABSTRACT: Four multi-skill educational software packages to develop children's skills in math, science, language and other core curriculum subjects through a selection of learning games and other challenges are presented. Creative Wonders/ The Learning Company's \$34.95 Baby-Sitters Club 4th Grade Learning Adventures is a two-CD offering, with the first CD focusing on math, science, language arts and social science. The second disk puts girls' skills to work and encourages group participation using multi-player games. The Learning Company's \$29.95 ClueFinders' 4th Grade Adventures aims at making students practice higher order thinking skills using an Indiana Jones-type adventure. The other two products are Knowledge Adventure's JumpStart Adventures \$45 4th Grade and Creative Wonders/ The Learning Company's \$34.95 Schoolhouse Rock 3rd and 4th Grade Essentials.

SPECIAL FEATURES: illustration; Table
COMPANY NAMES: Creative Wonders LLC--Products; Learning Company Inc.-Products; Knowledge Adventure Inc.--Products
DESCRIPTORS: Software multiproduct review; Children's educational
software; Educational/training software
PRODUCT/INDUSTRY NAMES: 7372472 (Children's Educational Software);
7372470 (Educational & Training Software)
NAICS CODES: 51121 Software Publishers
TRADE NAMES: Baby-Sitters Club 4th Grade Learning Adventures (Children's educational software)--Evaluation; ClueFinders' 4th Grade Adventures
(Children's educational software)--Evaluation; JumpStart Adventures 4th
Grade (Children's educational software)--Evaluation; Schoolhouse Rock 3rd
and 4th Grade Essentials (Children's educational software)--Evaluation
FILE SEGMENT: CD File 275

1/2,AB/2 (Item 2 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 1999 The Gale Group. All rts. reserv.

02105523 SUPPLIER NUMBER: 19793117 (USE FORMAT 7 OR 9 FOR FULL TEXT) Variable-data printing comes of age: capabilities & market demand

converge. (includes related article on the terminology used in this article) (Industry Trend or Event)

Drennan, Bill

Seybold Report on Publishing Systems, v27, n2, p3(22)

Sep 15, 1997

ISSN: 0736-7260 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 20196 LINE COUNT: 01563

SPECIAL FEATURES: table; chart; illustration

DESCRIPTORS: Market Trend/Market Analysis; Printing Industry

FILE SEGMENT: CD File 275

1/2,AB/3 (Item 1 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 1999 The Dialog Corp. All rts. reserv.

02908341

Utility

REAL-TIME BILLING SYSTEM FOR A CALL PROCESSING SYSTEM

PATENT NO.: 5,867,566

ISSUED: February 02, 1999 (19990202)

INVENTOR(s): Hogan, Steven J., Cedar Rapids, IA (Iowa), US (United States

of America)

Feltz, Kristi T., Cedar Rapids, IA (Iowa), US (United States

of America)

Murdock, Douglas R., Cedar Rapids, IA (Iowa), US (United

States of America)

ASSIGNEE(s): LinkUSA Corporation, (A U.S. Company or Corporation), Cedar

Rapids, IA (Iowa), US (United States of America)

APPL. NO.: 8-709,211

FILED: August 27, 1996 (19960827)

This application is a continuation of application Ser. No. 08-473,765, filed Jun. 6, 1995, (status: U.S. Pat. No. 5,590,181) which is a division of application Ser. No. 08-136,211, filed Oct. 15, 1993 (status U.S. Pat. No. 5,633,919).

U.S. CLASS: 379-115 cross ref: 379-119; 379-127

INTL CLASS: [6] H04M 15-00

FIELD OF SEARCH: 379-111; 379-112; 379-113; 379-114; 379-115; 379-119; 379-120; 379-121; 379-122; 379-133; 379-137; 379-135; 379-136;

379-260; 379-265; 379-266; 379-245; 379-246; 379-116

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5,606,602	2/1997	Johnson et al.	379-115

PRIMARY EXAMINER: Loomis, Paul

ATTORNEY, AGENT, OR FIRM: Lyon & Lyon LLP

CLAIMS: 18

EXEMPLARY CLAIM: 1 DRAWING PAGES: 209 DRAWING FIGURES: 209

ART UNIT: 273

FULL TEXT: 8417 lines

ABSTRACT

A system and method for processing telephone calls and providing enhanced services is presented. The call processing system includes a billing system that processes billing information records for completed calls. The billing system applies rate information stored in a rate file to the completed call parameters contained within the billing information record. Derived billing information is subsequently stored in a toll file. The billing system also uses rate information stored in the rate file to respond, in real-time, to rate quote requests. Upon receipt of a rate quote request from a requesting system, the billing system retrieves rate information from the rate file, calculates a cost/minute of a desired call, and returns a rate quote to the requesting system.

1/2,AB/4 (Item 2 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 1999 The Dialog Corp. All rts. reserv.

02840721

Utility

SYSTEM AND METHOD FOR DISTRIBUTING COUPONS THROUGH A SYSTEM OF COMPUTER NETWORKS

PATENT NO.: 5,806,044

ISSUED: September 08, 1998 (19980908)

INVENTOR(s): Powell, Ken R., P.O. Box 6265, Athens, GA (Georgia), US

(United States of America), 30604 [Assignee Code(s): 68000]

APPL. NO.: 8-603,482

FILED: February 20, 1996 (19960220)

U.S. CLASS: 705-14 cross ref: 235-383; 364-400; 395-200.3; 395-200.43;

395-200.79

INTL CLASS: [6] G06F 17-60; G06F 13-00

FIELD OF SEARCH: 235-375; 235-383; 235-385; 364-400; 370-400; 370-401;

395-200.3; 395-200.31; 395-200.43; 395-200.49; 395-200.6; 395-200.79; 705-10; 705-14; 705-20; 705-24; 705-400

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PRIMARY EXAMINER: Cosimano, Edward R.

ATTORNEY, AGENT, OR FIRM: Jackson, Jerome D.

CLAIMS: 29 EXEMPLARY CLAIM: 1 DRAWING PAGES: 20

DRAWING FIGURES: 27 ART UNIT: 271

FULL TEXT: 1021 lines

7

ABSTRACT

A system for dispensing and redeeming the electronic discount coupons. The system includes a personal computer (PC) having hardware and software for receiving an electronic coupon from the system of computer networks, translating the received coupon into a binary format, and sending the binary-formatted coupon to a card-writing device. The card-writing device writes the coupon data onto a portable customer card ("smart card") approximately the size of a credit card. Subsequently, the customer goes to the store with the card. Upon completion of shopping, the customer redeems the electronic coupons at the checkout area, by inserting the card into the checkout station. During checkout, the customer is credited with the value of a coupon when UPC data from a bar code reader corresponds to a coupon stored on the card.

1/2,AB/5 (Item 3 from file: 654)
DIALOG(R)File 654:US Pat.Full.
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02602053

Utility

CALL-PROCESSING SYSTEM AND METHOD [For detecting fraudulent use of a telephone network]

PATENT NO.: 5,586,175

ISSUED: December 17, 1996 (19961217)

INVENTOR(s): Hogan, Steven J., Cedar Rapids, IA (Iowa), US (United States of America)

Feltz, Kristi T., Cedar Rapids, IA (Iowa), US (United States

of America)

Murdock, Douglas R., Cedar Rapids, IA (Iowa), US (United

States of America)

Goodman, Todd A., Cedar Rapids, IA (Iowa), US (United States of America)

Vercande, David J., Cedar Rapids, IA (Iowa), US (United States of America)

Tangeman, Michael R., Cedar Rapids, IA (Iowa), US (United States of America)

Busch, Eric M., Cedar Rapids, IA (Iowa), US (United States of America)

Kripakaran, Raghavan, Cedar Rapids, IA (Iowa), US (United States of America)

Jayasimha, Madhigubba G., Cedar Rapids, IA (Iowa), US (United States of America)

Smith, Keith E., Cedar Rapids, IA (Iowa), US (United States of America)

Austin, Mark A., Cedar Rapids, IA (Iowa), US (United States of America)

Berry, Dana B., Cedar Rapids, IA (Iowa), US (United States of America)

ASSIGNEE(s): LinkUSA Corporation, (A U.S. Company or Corporation), Cedar Rapids, IA (Iowa), US (United States of America)

APPL. NO.: 8-460,633

FILED: June 02, 1995 (19950602)

This application is a division of application Ser. No. 08-136,211, filed Oct. 15, 1993, (status: pending).

U.S. CLASS: 379-112 cross ref: 379-113; 379-196

INTL CLASS: [6] H64B 13-00

FIELD OF SEARCH: 379-111; 379-112; 379-113; 379-114; 379-115; 379-121;

379-127; 379-189; 379-188; 379-91; 379-93; 379-186

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Product Information Brochure: DMS-250 Operator Services, Northern Telecom, Sep., 1987.

PRIMARY EXAMINER: Chin, Wellington

ASST. EXAMINER: Loomis, Paul

ATTORNEY, AGENT, OR FIRM: Sterne, Kessler, Goldstein & Fox P.L.L.C.

CLAIMS: 43

EXEMPLARY CLAIM: 1 DRAWING PAGES: 209 DRAWING FIGURES: 209

ART UNIT: 267

FULL TEXT: 8813 lines

ABSTRACT

A system and method for processing telephone calls and providing enhanced services is presented. The call processing system includes a network control processor for controlling the processing and routing of the calls and for providing enhanced features, and a matrix switch for routing calls from an originating location to a terminating location. Operator consoles can be included to provide operator assistance to the caller. The network control processor comprises a central message processor that receives call data, determines the type of call, determines the processing required, and determines whether operator assistance is required. A call route distributor allocates an operator console to the call if required. A billing server is used to track billing information for the call while it is in progress. A database server is provided for database look-ups and storage. The call processing system also includes a validation system, a billing system, a distribution system, and a fraud detection and prevention system. The validation system is used to validate call information to determine whether the call can be placed. The billing system determines rates for calls and calculates the cost of completed calls. The distribution system distributes changes that are made to a master database to the appropriate slave database. The fraud detection and prevention system monitors originating and in-process calls to detect and possibly prevent possible fraudulent uses of phone services and systems. A client interface is provided to facilitate communications among applications and DEF records are used to define specific call processing actions. ?t 1/2,kwic/2

1/2,KWIC/2 (Item 2 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

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02105523 SUPPLIER NUMBER: 19793117 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Variable-data printing comes of age: capabilities & market demand converge. (includes related article on the terminology used in this article) (Industry Trend or Event)

Drennan, Bill

Seybold Report on Publishing Systems, v27, n2, p3(22)

Sep 15, 1997

ISSN: 0736-7260 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 20196 LINE COUNT: 01563

SPECIAL FEATURES: table; chart; illustration

DESCRIPTORS: Market Trend/Market Analysis; Printing Industry

FILE SEGMENT: CD File 275

Variable-data printing comes of age: capabilities & market demand converge. (includes related article on the terminology used in...

TEXT:

WHEN WE LAST SURVEYED the field of variable-data printing systems a year ago, it was too early to comment very much on what was...

...Although more than 1,000 digital presses had been installed, few were being used to print variable-data jobs. In some cases, this was because the software wasn't ready. In...

... acceptance of this new technology. By now, many systems have been sold with variable-data printing capabilities and many of them are being used to produce customized documents.

To give an idea of some of the changes that have occurred, consider these items:

- * Banta is printing customized 80-page catalogs as a replacement for mass-produced 800-page catalogs.
 - * L.P...

...from menus and dragging and dropping them onto a page.

- * Agfa has developed a new printing architecture-called IntelliStream-to optimize its Chromapress system for printing variable-data jobs. It involves the development of a new format specifically aimed at processing...
- ...with a lot of heavy-duty hardware.
- * Indigo has released its Yours Truly variable-data printing application, which produces personalized documents on the E-Print digital presses.
- * ColorAge has begun shipping its DocuPress variable-data system for use with slower, less expensive Xerox printers. This system brings variable-data printing capabilities to the market for less than \$40,000-about one-tenth the price of...

...the Private Eye variable-data program for Xeikon, has added a Windows version of its PrintShop Mail, which serves even lower-end customers than the DocuPress.

* At Print '97, Kodak and Heidelberg made a joint announcement of their intention to develop a digital...

...find, from the high end to the low end. We looked not only at the printing systems and suppliers, but also at some of the customers using these products in the...

...Color digital presses were originally sold as a way to address the markets for the printing of short-run color jobs and for demand printing . The hope was that these applications would justify the purchase of a digital press. However, as offset printing has become more competitive in runs as low as a few hundred copies-and as the market for full-color, on-demand printing has lagged behind expectations-the merchants of color digital presses have started to look for other ways to make them attractive.

Full-color, variable-data printing became an obvious application to help sell digital presses. This is a market that offset printing technology can't threaten.

Making the case. In variable-data printing discussions, you will often hear references to the "one-to-one" marketing concept as promulgated

...Martha Rogers in their book The One to One Future. Keep in mind, however, that print runs of one will not justify the purchase of a \$400,000 digital press. This...

...as "age" or "income level." These are assembled together with personalized names and addresses in print runs of several thousand.

While much of the focus of variable-data printing has been on its potential for one-to-one marketing, one of the key drivers is cost savings. Although the cost per printed piece is much higher than for standard offset printing because the printing is targeted to only those customers that are more likely to buy the product, the print run is shorter and the waste factor is much lower. Because of the personalization and digital printing, the print run is exact; extra copies are not needed. The concept of obsolescence is also eliminated, along with the need for storage.

Those savings alone could make a case for personalized printing. But the key factor is the return on the investment. Many studies have been quoted...

...net increase in sales as a result of a targeted campaign. That is where a printer can bring value to a customer. Also note that for the types of products that benefit most from personalized printing, it doesn't take many new customers to justify doing the job.

Data issues. Another...

...minimal. A successful campaign requires information about individual customer preferences, buying habits and income levels.

Printers that start selling variable-data capabilities quickly discover that they are no longer selling printing. They are selling marketing, which requires a different set of sales tools. Knowledge about data mining, database programming, verification procedures, template design, buffer capacity and connectivity to digital print engines becomes as important as the quality of the printing.

Patience. Be prepared for a long haul. Marketing campaigns built

around variable-data printing can take months to prepare. The much-vaunted Fair Information Services auto-club guide produced in process for a full year before printing began.

Dealing with other issues

Although great progress has been made in making variable-data printing a viable application for digital presses, many problems still need to be addressed.

Proofing. A...

...the screen. The only way to know what will happen is to conduct a test print run of one or more items. Since these systems are demand printers, that process is not unreasonable.

In other cases, such a screen preview or proof printout is insufficient. For example, for variable-data jobs that include sensitive information or are targeted...

...of marketing, a company must be willing to release information from its database to a printer. In many cases this information is sensitive and proprietary. It is questionable whether this type of data would be released to a printing company that does not already have a long-term relationship in place with its client...

...result in color differences, although it is possible to use different color profiles for different printers to compensate for variations.

Degrees of variability. One question that needs to be answered before getting involved with variable-data printing is, How much variability do you need? The personalization of a few hundred documents using... ... the original database file, pulling the required information into the document.

The workflow

Variable-data printing is the final step in a process. It cannot be thought of as a stand...

...output. Portions of the plan include design, databases, illustrations and finally output to a digital printer that is able to handle variable imaging.

Designing the database. For a variable-data application...

...and content. Many clients will not simply hand over their database of customers for a printer to use in a direct-mail campaign. The client will need to know what information...

...mainframe or a PC. Data might exist as hierarchical, networked, relational or flat-file. The printer needs to know enough about databases to be able to communicate with a client's IS department.

Once the data are ready to be pulled and sent to the printer, ownership of those data needs to be determined. The ability to pull photos has to Are different layouts available depending upon conditions in the data?

A variable-data printing sale may depend upon the answers to these questions. And the answers are different for...

...increase the response rates. These are good as an add-on to short-run color printing and on-demand applications for digital presses. However, in most cases, short runs cannot justify...

...handle complex designs and high throughput, others are on the way. What bodes well for printers, digital press suppliers and vendors of variable systems is that variable-data printing is part of the enabling of a new, personalized marketing strategy that will ultimately change...

...are sold.

Conclusion. As you can see, there has been considerable development in variable-data printing over the past few months, with much more promised in the relatively near future. Normally...

...two years from now, you may still be a year or more away from actually printing the first page of a mass-customization program. The market and the capabilities are converging...

...try to cover all of the products that conform to our definition of variable-data printing with full support for process color, PostScript typographic functions and other characteristics of modern-day...

...systems have been installed, including 100 with the new IntelliStream architecture directly at variable-data printing . But few of the current users are producing variable-data jobs because the early system...

...feature, which adds \$39,000.

EARLY THIS YEAR, Agfa enhanced its Chromapress for variable-data printing by introducing its IntelliStream output manager. It incorporates a new PowerRip PostScript interpreter for rasterization and compresses documents into IntelliPac device-independent print files that contain trapping, color management, CMYK separation data and variable data ready for real...

...compression, files are passed to the output manager, which, when the job is ready to print, decompresses the files, merges fixed and variable page elements, and adds screening and calibration values specific to the print engine, making it possible to prepare jobs offline and print them on any engine. The output manager streams output at the rated speed of the print engine for either the Xeikon DCP/32i or the 50i.

Rasterized files can be routed back to a Mac workstation for previewing or archiving. The system can rasterize, print and download rasterized files while printing a separate job. The system also provides offline rasterizing and storage capabilities.

The IntelliStream system...

...2-GB disk drives. Each processor drives two of the eight stations on the Xeikon print engine (four each to print the front and back of a sheet). As digital presses get faster and wider, more...

...The software also allows variable-data jobs to be previewed, proofed and browsed, prior to printing .

When combined ...into Personalizer-X.

Verification and tracking are available through visual proofing or from record numbers printed on each page. In the case of a jam or destruction of documents, it is...

...times with different messages. These increased response rates justify the increased costs involved with personalized printing .

Thebault, which recently purchased three Chromapresses to serve a

single, large, automotive client's variable-data needs, believes the market for variable-data printing is poised to explode. Prep time is the major issue with variable data. Up-front...

...database to ensure that the data will flow correctly into Thebault's system.

Variable-data printing can be an expensive proposition compared with mass marketing of static printed pages, Thebault notes. Compared with offset printing, the cost per page is high. And the amount of preparation time required can be very high. However, the basic premise for using variable-data printing is very different from the principles behind mass marketing.

The first thing Thebault stresses is that variable-data printing doesn't require selling printing; it is a marketing project. The premise is that a personalized, targeted campaign will net a higher return than a mass-marketing campaign. What digital printing -and, more specifically, variable-data printing -makes possible is a departure from the mass-marketing techniques used for the past 20 years to sell most products. To sell this type of printing effectively, a printer has to reach the prospective customer's marketing department, not its print buyer.

The problem is that there has been no precedent established to track the type of returns that are possible with personalized printing campaigns. Those who have experimented with it are not about to share their results yet...

...price of the IntelliStream architecture on a Chromapress.

To help its customers sell variable-data printing, Agfa has produced a software package called ODIS (On-Demand Information Strategy) that allows potential customers to calculate their returns from a custom printing application. The program factors in such things as storage costs, unused pieces and printing costs to calculate a rate of return necessary to justify the use of variable-data printing. In general, a higher return of a couple of percentage points justifies the higher cost of printing. The good part about the program is that if a printer gets a chance to present it, the customers get to do their own calculations.

OUR...

...its price is right for many high-volume applications.

Atlas serves the low end

STATUS: PrintShop Mail is a basic personalization routine running on a Macintosh or PC and driving Canon 40 and DocuTech printers sold in the Netherlands. The NT version is brand new. For someone who wants to...

...without investing a lot (prices start at \$395), this program provides an opportunity.

ATLAS'S PRINTSHOP MAIL is a personalization routine for entry-level users working with Macintoshes or PCs. It...

...for use with a Macintosh or PDF for use with Windows.

Operation. In operation, a PrintShop Mail document is created and the EPS or PDF file is placed. The database is loaded into PrintShop Mail (or the tab-delimited file is converted). Database fields are dragged and dropped onto...

...layout. Special operations such as automatic numbering or additional data processing are specified.

When the print command is initiated, the static data are merged with variable data fast enough to allow the print engine to run at its full

rated speed, Atlas says. In this operation, the static...

...functions are available, including conditional expressions (if, then, else). Previews show actual data prior to printing .

The whole document can be variable. The area is copier dependent, and 255 variables per...

...with optimal processing for RIPs that support forms. Prices are dependent on the number of prints desired: up to 50,000 for a price of \$395; up to 200,000 for \$1,495; or an unlimited number for \$3,995. Once the total number of prints is reached, the program goes into demo mode and a new dongle must be acquired...

...functionality beyond simple name and address merging.

Barco claims the high ground

STATUS: Barco's PrintStreamer output manager utilizes a 233-MHz DEC Alpha platform running Barco Graphics' FastRip/X PostScript...

...Xtension for setting up variable-data jobs that starts at about \$10,000. Approximately 150 PrintStreamer systems have been installed. About 10% produce variable-data jobs. The PrintStreamer, which sells for between \$80,000 and \$150,000, is usually purchased in conjunction with...

...press manufacturer, its philosophy has been to concentrate on the front end rather than the print engine. The company, which has experience in handling large sets of data destined for imagesetters and platesetters, sought to convert this experience to digital printing in general and variable-data imaging in particular. Although growth to date has been slower...

...company anticipated, Barco expects an explosion in the near term as prices for digital color printing fall and database knowledge among customers builds. These developments will make variable printing accessible by marketing departments, ad agencies and public-relations firms as they learn what is possible.

In general, Barco says, running a variable-data printing job has several requirements in addition to the digital press itself:

* The information that will...

...end to the digital press supplies the variable data to the engine at its nominal print speed.

* Management software manages the data and the workflow.

The Barco product for variable printing includes its PrintStreamer and its VIPLine software for creating layouts for customized documents. The PrintStreamer is a buffer that stores and recombines rasterized elements. It is capable of holding up to 20,000 text pages or approximately 2,000 color pages. These pages can be printed in any sequence and variable information can be merged with master pages at nominal printing speed.

Another part of the equation is Barco's client-server access module (CSAM), which...

...initiated and monitored, including integration of all of the different components comprising a variable-information printing workflow.

User report. Barco's customer, Banta, which uses a Xeikon press with a Barco RIP, PrintStreamer and VIPLine, is printing customized 80-page catalogs as a replacement for mass-produced 800-page catalogs.

11/19/99

VIPLine. VIPLine is in its 1.0 version, with an upgrade demonstrated at Print '97. The editor allows documents designed with any desktop package to be adapted to include...

...without going back to the workstation.

The pages are then rasterized and sent to the PrintStreamer, which acts as a large buffer containing an array of disks capable of storing all of the pages of one or more jobs. The PrintStreamer imposes the job and sends these pages in real time to the digital press in...

...all of the instances of the customized document.

The program, which is used with the PrintStreamer, provides 100% variability and an unlimited number of fields. It can use DeltaGraph to create...workstation and DEC Alpha server costs between \$120,000 and \$150,000. In addition, a PrintStreamer is required as part of the digital press configuration. The upgrade, which will be available...

... Used in This Article

In reading this article, keep in mind that the variable-data printing we are focusing on goes far beyond simple mail merges and the publishing of documents from databases. As we noted in our last update on this field, customized printing has been made possible by developments in high-speed RIPs, compression routines that average as...

...of data to create a raster bitmap, such as at the time a document is printed . The objective is to avoid having to RIP data unnecessarily at the time a job is printed . Thus, in customized printing it is important to RIP static data in advance, store the bitmap on a hard...

...in data-processing environments-the act of pulling new data from a database for successive prints, but using bitmapped fonts and logos, without a need to rasterize the data prior to printing.

Quark inlay variables-the ability of a Quark Xpress Xtension variable-data program to define...

...middle) of the market.

ColorAge has capability, needs interface

STATUS: ColorAge offers its variable-data printing capability as part of its DocuPress RIP that drives 6-ppm Xerox printers. The system costs less than \$35,000, including all hardware. The keys are a software...

...system, DiamondMerge, is a capability that resides within a DocuPress color document server for Xerox printers . The capability is accessed via a viewer in the DocuPress. There is no user interface available to the document creation program. And documents cannot be previewed prior to printing . To run a variable-data job on the DocuPress requires some operator skills and imagination...

...DocuPress to overlay two or more pages to create a new page. For variable-data printing, it overlays one or more static pages with a ... page of the brochure.

Operation. The main four-page form was created in Xpress and printed to a PostScript file. The large automobile photo on page 3 is one of ten...

...both the template and the data file. Using mail merge in the Word tools,

the printer was selected as the destination and a range of records to be merged was selected. In the Print dialog box under device options, several PPD settings were changed. The document was then ready to print.

OUR TAKE: This is a product in need of an application. It takes quite a bit of setup to prepare a file for printing and it doesn't provide a preview, but it is capable of producing fairly complex...

...money for a RIP with this much capability to drive a \$20,000 Xerox color printer. The variable-data capability is but one of several functions on the DocuPress server. Continuous printing, electronic collation and color management are among the others. If a simple user interface is...

...take variable data one step farther, mining data directly from a corporate database.

VARIABLE-DATA PRINTING is a key application for IBM, although it isn't totally new. In the production printing marketplace, it has been supporting variable-data processing for several years, although it involves the...

...addresses and billing applications, mostly black and white with some spot color. This kind of printing isn't the focus of this article.

For the kind of jobs we are addressing...

...each file independently, when it and may or may not factor in repeated data. (At Print '97, IBM showed an InfoPrint 4000 using Extreme architecture for black-and-white variable-data production printing at a speed of 464 letter-size pages per minute.)

Setup tools. IBM's design...

...then uses a document-building program to assemble them. This tool also interfaces with the printer, so it knows whether electronic collation is available. The tool will work in PDF to...the prepress data mining, preparation and design, and send the data to be rasterized and printed. With a non-closed-loop system, where a printer has variable-data printing capabilities, a lot of communication is required so that the data supplied match the requirements and capabilities of the printing system. For example, a securities firm is unlikely to release its database to a commercial printer for that printer to mine and extract the required variables. It is more likely that the printer will have to supply the parameters to the customer that does the extraction and supplies...

...one component must be run at the customer site, with the design handled at the printer .

Another sophisticated tool that is related to a custom program is Campaign Management. This type...

...the system is required to do data extraction and then track responses.

From a commercial printer 's point of view, variable-data printing is a new problem. Commercial printers are used to creating a proof and then running hundreds, thousands or millions of the same item. You cannot proof a customized variable-printing job because each item is different. You can proof only the templates and the form. The responsibility for printing accuracy shifts to the printer because signoff becomes impossible. Commercial printers face the need to move from a skill-based operation to a knowledge-based operation...

...and insurance industries will be the early adopters because of the competitive advantage variable-data printing offers for protection of the top 5% of their customers, upon which they rely heavily...

...color presses has been on short-run applications. This is a fallacy because an offset printer will bid down short-run prices for its customers in order to hold on to...

...compatibility issues that could hinder its ambitious data-mining aspirations.

Indigo tests Xtension for E-Print

STATUS: Indigo's Quark Xtension, called Yours Truly, provides a personalization routine designed to bring variable-data capabilities to its E-Print 1000. The software, still in the testing stage, will be provided as part of the E-Print personalization package.

INDIGO'S YOURS TRULY SOFTWARE is an Xpress Xtension that works with FileMaker...

...the job is output as PostScript files and then rasterized and sent to the E-Print 1000. A second job can be RIP'ed while the first is printing . The program is limited in that it doesn't support conditional statements, it is ...master could be pulled and the variable text rasterized on the fly on the E-Print 1000. Another use could be in printing season tickets, where the masters could show various sports teams and logos and the individual...

...variables and does not support OPI functions. The idea of using a \$379,000 E-Print in a kiosk environment seems a little far-fetched, but if at some future point...

...capability to Xtensions

STATUS: There are two components to the Scitex approach to variable-data printing: the Variable Print Specification (VPS) and the Darwin application. Together, Darwin and the VPS RIP allow, within a single print run, changes in page layouts and changes in the number of pages in a document...

...will be available later this year.

THE FIRST PREREQUISITE for a campaign using variable-data printing is for a marketing plan by the company that needs to have the printing done. Among other things, that plan must take into account the capabilities and economics of the available print engine, including the optimal number of impressions for the job. Designs need to be formulated...

...are issues relating to the database, the setup and the design.

For variable-data processes, printers must break out of the print
broker mentality, i.e., orders to print a number of copies for a specific
price per copy. This has to be changed...

...other words, conditional variables). The database can include information that is not destined to be printed, but rather is used to construct documents, e.g., "age" or "sex" may determine the...

...to be pitched, etc.

There are two components to the Scitex solution for variable data printing: the Variable Print Specification (VPS) and the Darwin

application. Together, Darwin and the Scitex VPS RIP allow, within a single print run, changes in page layouts and also in the number of pages in a document...

...front ends for the DocuColor 40. Scitex eventually hopes to make VPS a standard for print engines to allow variable-data processing from multiple applications.

With variable-data jobs, the concept...

...Instead, prerasterized page elements are assembled into pages at high speed, which then feed the print engine.

Document authoring. The second part of the Scitex approach, the Darwin document authoring tool...a database and can arrange to import elements in whatever order is suitable for the print job. Darwin uses a "Profile" (a description of fields to be used in a job...

...3.32).

Verification and tracking. There are no comprehensive tools for verifying and tracking a print run. The Print Run monitor advises operators of missing elements (a mini-preflight check) and the Scitex digital front end reports printing errors. But to date, there is no way to check to ensure that what was...

...is only a minor roadblock. If the databases are set up correctly, the job will print correctly. Print runs can be sampled to spot check the correctness of the documents.

Target markets. Current...

...have targeted customers and markets that range from phone cards to product catalogs based on Internet transactions. As word of successes spreads, the demand should increase substantially.

Scitex sees its market...

...size pages per hour. The implementation of a cache mechanism, under development, could greatly increase print run lengths.

Design is very important in creating a variable-data document. Scitex will issue...

... is uneconomical to do so.

Workflow. For Darwin-generated files sent to a VPS-enabled printer, the variable-information job, described as a VPS file, with all associated EPS elements, is fed into the printing system. Each different page element is then individually rasterized. In the RIP, elements are cropped ...page compositor assembles all of the pages for the first "booklet" into a "ready-to-print" format capable of driving the print engine directly. As these composite files are assembled, instructions for including any inline PostScript data...

...RIP. These data are rasterized on the fly and immediately incorporated into the ready-to-print page in a process Scitex calls "Meld." This process occurs as soon as all of the elements necessary for a page are rasterized. In normal operation, the print run will not start until the whole job is rasterized. This allows the print engine to run at full engine speed, working uninterrupted from the printer disk. While one job is printing, another can be rasterized and "melded." It is also possible to run a job "booklet...

Ella Colbert

...starting and stopping the engine. Scitex is looking at the possibility of breaking up a print run into smaller groups for greater efficiency. Running a job. Running a job with Darwin...

...drag-and-drop techniques.

OUR TAKE: Darwin is a very sophisticated program for variable-data printing of limited run lengths. The ability to run conditional data sets it apart from other...

...RIP at \$20,000 is reasonable for the capabilities.

T/R adds variability to cluster printing

STATUS: T/R's MicroPress Cluster Printing system offers a VariableForms option for about \$1,500. It allows PC- or Macintosh-created

...on top of static pages to create variable-data applications.

THE T/R MICROPRESS Cluster Printing system provides variable-data capabilities for those customers wanting to personalize their materials. Using the...

...Word, PowerPoint, etc. Then it is sent to the MicroPress ClusterServer. It is possible to print to the MicroPress from an application, just like any PostScript device on the network. Once spooled to the ClusterServer, the form is rasterized and placed in the PrintStation Manager module.

To use a document as a form, the job is selected and the...

...of variables that can be accommodated. However, text will not reflow when the job is printed . The system creates individual static overlays out of variable data, such as addresses, and merges...

...of entire pages are supported. A preview feature allows rasterized jobs to be checked before printing. The system is OPI compatible; an OPI spooler is included with the base system.

T/R sees the demand for variable-data printing increasing.

One-to-one marketing and personalized proposals are becoming more evident.

T/R customers...data feature to customize newsletters and letters.

A MicroPress system with two black-and-white PrintStation 024s and a ClusterServer starts at a price of about \$37,000. The VariableForms option

...the other. All-in-all, it is a nice addition to T/R's cluster printing capabilities.

Varis removes spooling from b&w process STATUS: The Varis VariScript suite of products...

...discussion because of its unique aspects, including the ability to rasterize data directly to the print engine and the ability to save PostScript display lists. The products, comprising VariScript software, the

...priced between \$50,000 and \$295,000, depending upon the required performance level of the printer.

Varis has created a RIP process that allows the marriage of variable and static data within the system and sends those data immediately to the printer, operating at a sustained bitmap data dispatch rate of 500 megabits per second for monochrome and spot-color printing. In a test run, the system easily handled a 1,000-ft.-per-minute ink-jet printer.

What this process means is that files no longer need to be merged, rasterized and spooled prior to printing. Job changes do not require reprogramming and respooling because the variable pages are composed immediately prior to printing.

The biggest saving that the product offers is in programming time. Most processes currently involve...

...respooling the data.

VariScript software. Two types of files are needed to run a variableprinting job. A PostScript file contains the individual style sheets or page descriptions that provide the...

...the operator uses a touch-screen visual interface to submit a job ticket for a print job. The job ticket identifies the specific files required for the job and the information...

...renders that page into a bitmap in real time and sends it directly to the printer.

The software pulls the style sheets from the form created by any PostScript application and...

...t build them for graphic states. It doesn't make sense to do so when printing data that don't repeat, e.g., a 100-page manuscript. With variable-data printing, however, data are inherently repeatable.

RIP design. The VariScript software is embedded into the HPO...

...module. The HPO is an ultra-high-speed RIP that creates bitmapped images for multiple print engines on the fly. The system has LAN, WAN and Internet connection utilizing standard TCP/IP and SNMP protocols.

The HPO automatically converts the PostScript files...

...to output, generating an audit trail in real time. Because the HPO keeps track of printed pages, in the event of a jam, only that portion of the printing that was lost needs to be reprinted.

Several features are resident within the HPO. These...

...automatic bar-code generation, thumbnail templates, fonts and international multibyte support, including user-defined byte-translation tables.

Serializers can be alphabetic, alphanumeric, special or static. For bar coding, the HPO can...

...the production run, providing the mechanism to separate the data and prepress functions from the printing and post processing functions. This allows the same RIP to connect to multiple printing devices. Within the job ticket, a multiengine manager controls machine-dependent parameters such as the number of print heads, their locations, book imposition and perfecting, gutter adjustments and bindery alignment.

Differences in production...job ticket, eliminating the need to modify data files and PostScript style sheets for different printers.

The software is capable of placing multiple records on a page and specifying a break...

...start a new envelope, select a type of envelope and decide whether or not to print or insert additional optional materials, based on the weight of the required materials that are being printed. For example, an envelope carrying a one-page invoice may be able to carry also a page or two of marketing literature that can be printed on the spot.

Fields can be specified as variable, with different specifications layered on top...

...operator may or may not be able to access. Running a proof on a laser printer will usually pinpoint any font problems prior to production.

VariScript supports the use of data...

...to fit into a constraining box.

Two types of preflight checking are required with variable printing jobs on the Varis system. First is a PostScript check of the template by sending it to a desktop PostScript printer. The second is a check for variable-data placement, requiring laser printouts to look at the minimum and maximum field lengths in the database to be sure...

...in their designated area. For debugging, the entire job can be preflight tested without actually printing anything, in which case errors are logged in an error file.

The system includes a...

...for the template. The software is open and can be used with any prepress or print system. The auditing system begins at data collection and continues all the way through postprocessing...

...use dummy data for testing, going to the customer's database only for the actual print run.

The price for the Varis RIP ranges between \$50,000 and \$295,000, depending upon the required performance level of the printer.

OUR TAKE: For high-speed production of variable data, the Varis system presents some unique...

...the spooling step and the accompanying management of spooled data by rasterizing directly to the printer. And it provides access to multiple printers from the same RIP, so that if a printer scheduled for a job is unavailable, the job can be run on a different type of printer configured with the system.

Xeikon stakes hopes on variable future

STATUS: Xeikon offers two variable-data printing options: its own VDS (variable-data system) and the one developed in conjunction with Barco

...merging variable data withmaster-page information. It outputs PostScript files for either the VDS or PrintStreamer. Xeikon printers range from \$285,000 to \$600,000, depending on options.

XEIKON IDENTIFIES three variable-data segments:

- * Single fixed master, where variable data such as direct mail or tickets are printed on top of one single, fixed master page. This is the best-known variable-data application. A single page is personalized, after which a second copy is printed with another name and address, etc.
 - * Multiple cyclic master, where each page in a set...

...with additional variable data. Examples are personalized presentation handouts and numbered catalogs. Complete sets are printed and assembled.

* Multiple arbitrary fixed masters, where information changes in two dimensions or layers. This area, which is the most complex variable-data printing application, includes personalized response cards and custom personalized information. Suppose a reader has returned a...

...like information about products X and Y. A personalized set of information leaflets could be printed concerning these products, personalized with custom information (name, address, etc.). For another reader, information on products Y and Z needs to be printed and customized. Several applications like this can be found-insurance-company mailings, customized manuals or catalogs, commercial billing, financial statements, etc.

Xeikon provides two variable-data printing options. One is a Xeikon development available as its VDS (variable-data system). The other has been developed in conjunction with Barco Graphics and is based on the PrintStreamer disk array. VDS covers applications where there is a single fixed master. The PrintStreamer enables all applications to be covered by a single system.

VDS. The entry-level VDS...

...set of dedicated variable-data memory modules fit into the image memory board of non-PrintStreamer configurations. The software controls the master page and variable-data fields.

In the VDS concept...

...for the VDFs are rendered and spooled on the internal spooling disk array.

Once the print command is given, the master-page bitmap is downloaded into the standard image memory, which...

...applications. The different VDFs for the first record that fit on the first sheet being printed are downloaded into the variable-data memory buffer. With the first record loaded, the press starts printing, merging the contents of the master memory with the contents of the VDF memory on...

...disk array into the VDF memory, and so on until all the records have been printed. Rasterizing, spooling and downloading of jobs in parallel remains possible, even while processing variable-data...

...positioning, formatting and transparency. The latter enables the operator to use different transparency features for printing variable data on top of the static master pages.

High-end users of VDS, mainly...

...merging of variable data with master-page information, outputting PostScript files for either VDS or PrintStreamer .

Private-I was developed as a stand-alone Mac application. Master-page elements can be...

...can be prepared from within many commercial applications, using Private-I to process output in PrintStreamer -compatible output format.

Xeikon also supports Barco's VIPLine configuration, which expresses variable information, not...

...a wide range of effects and manipulations, such as wrapping text around a curve or printing in a full gradient fill of rainbow colors. (See the section on Barco for a...

... several additional prerequisites are involved when processing variable

data, in addition to general publishing and printing requirements.

In addition to standard layouts, variable-data printing implies input from databases. Database output can be complex, ranging from a basic address listmanipulation and separation prior to printing.

In general, expertise on data manipulation with the most common database applications and basic database programming knowledge are minimal requirements. However, when considering serious variable-data printing as part of a printing business, the actual printing will be a small part of the whole service. Preparation, manipulation and verification of data...

...programs

For final output, databases need to be set up according to the requirements of printing. All of the data need to be verified and sorted, images need to be checked...

...extra care. All images need to be verified for size, color and resolution prior to printing. Images also need to be made available from within the merging workflow. In the Private...

...limited by themselves, the whole set of images for the total number of records to print may easily end up being a huge set of information to handle. It is recommended...

...I allows the on-screen preview of all implemented records in the database to be printed. The complete layout for every copy in the print sequence can be verified on-screen. In addition to manual verification, the application itself will...

...being passed in the layout that could later result in problems.

Buffer limitations. With the PrintStreamer setup, the whole page can be filled with variable information. With VDS, the system poses...

...are downloaded record after record from the spooling disk array into the VDS memory modules, print after print. The bandwidth for downloading from disk to memory boards is limited in number of bits...

...is more easily compressed than images. The quality aspect plays another important role. Xeikon engines print at 600 dpi with up to 64 gray levels per spot, addressed using six bits...

...laid out in variable-data fields in Private-I will reflow automatically when they are printed . The size of the field should be made large enough to hold the longest possible...

...two variable-data fields overlap, they are interpreted automatically as one total field. However, with PrintStreamer, full-page areas can interact, with both layers varied independently. Master pages can vary while...

...individual pages. When specific applications cannot output directly to EPS files, there are workarounds using print drivers or intermediate formats.

Variable-data fields can be rotated in 90 steps. ...further defined for proportional or perfect fit.

Verification techniques. Verification and tracking are done upon printing. Private-I allows the operator to split large runs into smaller segments to look at a print run more easily. In addition, individual

records can be printed in sequence to provide easier reprinting of damaged copies. Private-I offers a full, on...

...errors in the layout.

Although Xeikon's main focus is on short-run color digital printing, variable-data printing is one of the key aspects of true digital printing. Demand for variable-data printing is increasing, but it requires a high degree of commitment from the printer. Resources need to be allocated to preparation, with printing relegated to one stage in the process. Xeikon believes a high percentage of print eventually will be customized, versioned or personalized. As an example, the use of customer cards in supermarkets will soon provide full detailed databases of buying behavior preferences of individual customers...

...their choice or on competing products.

Xeikon believes that, although the demand for variable-data printing currently comes mainly from larger companies in banking, distribution and marketing, these companies more often...

...provide their publishing services.

OUR TAKE: As a supplier of the high-speed digital color print engines used by Agfa, IBM and Xerox, in addition to its own sales, Xeikon has a vested interest in the success of variable-data printing. Successful implementation of customized campaigns by large marketers could increase the demand for color digital printers exponentially. Look for Xeikon, together with its partners, to find ways to educate the marketplace

...to increase demand.

Xerox calls for standards

STATUS: Xerox, with its array of digital color printers, is looking at all ranges in the market, from simple personalization to ultra-high-end

...from Atlas, ColorAge and Colorbus are available now.

XEROX SEES THE MARKET for variable-data printing evolving very rapidly. Some markets, such as financial and high-ticket items, can afford to...

- ...Xerox is looking at all of the market segments from the very low-end desktop printers to production-class printing devices. These include three levels of variable-data printing.
- * The first level would be a full-featured system where hardware and software reside on...
- ...would provide access to legacy databases, improve the speed of the workflow and optimize the printing function. Tools would be included to access, for example, pictures on a Helios server, text...
- ...a DEC mainframe and data on an RS 6000, and merge these variables into the print stream. These tools would minimize the need to customize legacy databases.
 - * The second level would...

...or template would reside on the digital front end, with transparent overlays sent to the printer with the variable data.

* The third level is a software approach where the digital front end

takes previously merged data and prints it.

While Xerox would not be specific, it did say that all of its front-end partners are working on variable-data printing.

Paradigm shift. Variable-data printing has the potential to change the way business is conducted, Xerox believes. Instead of ordering print through a print buyer, marketing managers and financial managers, the people who have control over the use of...

...the purchase. This will require an unprecedented level of trust between a corporation and its print provider, forming a partnership that could involve several months or years of planning for a campaign.

This is a very different type of sale for a printer. It is a long-term deal that involves fulfilling jobs conditional upon previous jobs. For example, the volume of a second printing job may depend upon the response or lack of response from the first printing. Xerox feels that it may take as much as a five-year development process for...

...get to that point.

Although there is an assumption that the benefits of variable-data printing will far outweigh any differentials in prices, there is a long way to go before...

...can be considered as a replacement for mass marketing via mail campaigns.

For color production printing, the color has to be right. Not only must the original images be color correct...

...If data exist in different forms in different archives, there must be a mechanism for printing these diverse assets in a format that makes sense. Xerox would like to see a consortium formed to set standards for variable-data printing. Issues that need to be addressed include security, photo formats, sampling techniques and methods to retrieve archived data. This body could also set guidelines for licensing and certifying variable-data printers and rules for what happens if something goes wrong.

OUR TAKE: It is obvious that Xerox will be one of the larger players in the variable-printing arena. At this point, it looks as if more than one proprietary system will be...

...believe they will be difficult to achieve in such a diverse arena as variable-data printing.

Other players join the fray

IN ADDITION to the preceding comments on individual companies, there are several other players in the variable-data printing field that deserve mention. These companies are either coming out with new products or, in...

...architecture.

Adobe Systems. About a year ago, Adobe put out a position paper on personalized printing. At the time, the company's Printing and Systems Division was building a personalization specification to allow front-end applications and back...

...and Adobe jointly announced that IBM's 452-page-per-minute InfoPrint 4000 monochrome production printer is now fitted with Extreme, which allows, among other things, variable printing on the fly. IBM also

indicated that it will incorporate Extreme architecture in other printers, including color ones, in the InfoPrint line.

We will be anxious to see if variable-data printing will become available using the Extreme architecture with the InfoPrint 70, although it is doubtful that variable-data color printing will be available anytime soon without the use of a page buffer.

Canon. To date, the only application we have seen running on a Canon printer has been the Atlas PrintShop Mail program described earlier. We hope to see an application for the CLC 1000 come...

...the near future.

Colorbus. At the Seybold expo in New York, Colorbus introduced MindGate's PrintChef Pro bundled with its Cyclone servers, which drive color copiers and large-format color printers. PrintChef Pro allows the Cyclone to rasterize the static data in a document and then, during...

...charge for Colorbus customers.

EFI. Electronics for Imaging has kept its plans for variable-data printing confidential. Although it is known that the company is working on a solution, results will...

...DataMerge and Group Picture Xtensions to Xpress were released by Meadows just in time for Print '97. According to the company, the DataMerge Xtension is used to assign variable links to...

...picture boxes in an Xpress document from an external database. The merged results can be printed or saved as individual Xpress files. A FormPrint option automatically determines which areas of a...

...priced at \$249.

Splash Technology. Splash also is keeping its impending venture into variable-data printing confidential. Expect an announcement at Seybold San Francisco.

Vision's Edge. Another new Xpress Xtension, previewed at Print '97, is Vision's Edge's Focus, a front-end only. It requires the use...

... Used in This Article

In reading this article, keep in mind that the variable-data printing we are focusing on goes far beyond simple mail merges and the publishing of documents from databases. As we noted in our last update on this field, customized printing has been made possible by developments in high-speed RIPs, compression routines that average as...

...of data to create a raster bitmap, such as at the time a document is printed . The objective is to avoid having to RIP data unnecessarily at the time a job is printed . Thus, in customized printing it is important to RIP static data in advance, store the bitmap on a hard...in data-processing environments-the act of pulling new data from a database for successive prints , but using bitmapped fonts and logos, without a need to rasterize the data prior to printing .

Quark inlay variables-the ability of a Quark Xpress Xtension variable-data program to define...

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...DESCRIPTORS: Printing Industry
?s indigo and e(w)print
      2947 INDIGO
     946052 E
      97909 PRINT
       318 E(W)PRINT
   S2 148 INDIGO AND E(W)PRINT
?t 2/py/1-148
2/PY/1 (Item 1 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.
1999
2/PY/2 (Item 2 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.
1999
         (Item 3 from file: 275)
2/PY/3
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.
1998
2/PY/4 (Item 4 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.
1999
2/PY/5 (Item 5 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.
1998
2/PY/6 (Item 6 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.
1998
         (Item 7 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.
1998
2/PY/8 (Item 8 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.
1998
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2/PY/9 (Item 9 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

1998

2/PY/10 (Item 10 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

1998

2/PY/11 (Item 11 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/12 (Item 12 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/13 (Item 13 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/14 (Item 14 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/15 (Item 15 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/16 (Item 16 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/17 (Item 17 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/18 (Item 18 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/19 (Item 19 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/20 (Item 20 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/21 (Item 21 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/22 (Item 22 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/23 (Item 23 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/24 (Item 24 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/25 (Item 25 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/26 (Item 26 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/27 (Item 27 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/28 (Item 28 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/29 (Item 29 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/30 (Item 30 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/31 (Item 31 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/32 (Item 32 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/33 (Item 33 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/34 (Item 34 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/35 (Item 35 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/36 (Item 36 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/37 (Item 37 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/38 (Item 38 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/39 (Item 39 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/40 (Item 40 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/41 (Item 41 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/42 (Item 42 from file: 275)
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2/PY/43 (Item 43 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/44 (Item 44 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/45 (Item 45 from file: 275)
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2/PY/46 (Item 46 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/47 (Item 47 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/48 (Item 48 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/49 (Item 49 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/50 (Item 50 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/51 (Item 51 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/52 (Item 52 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/53 (Item 53 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/54 · (Item 54 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/55 (Item 55 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/56 (Item 56 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/57 (Item 57 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/58 (Item 58 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/59 (Item 59 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/60 (Item 60 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/61 (Item 61 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/62 (Item 62 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/63 (Item 63 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/64 (Item 64 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/65 (Item 65 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/66 (Item 66 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/67 (Item 67 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/68 (Item 68 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/69 (Item 69 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/70 (Item 70 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/71 (Item 71 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/72 (Item 72 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/73 (Item 73 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/74 (Item 74 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/75 (Item 75 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/76 (Item 76 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/77 (Item 77 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/78 (Item 78 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/79 (Item 79 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/80 (Item 80 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/81 (Item 81 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/82 (Item 82 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/83 (Item 83 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/84 (Item 84 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/85 (Item 85 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/86 (Item 86 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/87 (Item 87 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/88 (Item 88 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/89 (Item 89 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/90 (Item 90 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/91 (Item 91 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/92 (Item 92 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/93 (Item 93 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/94 (Item 94 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/95 (Item 95 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/96 (Item 96 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/97 (Item 97 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/98 (Item 98 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/99 (Item 99 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/100 (Item 100 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/101 (Item 101 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/102 (Item 102 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/103 (Item 103 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/104 (Item 104 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/105 (Item 105 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/106 (Item 106 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/107 (Item 107 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/108 (Item 108 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/109 (Item 109 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/110 (Item 110 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/111 (Item 111 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

2/PY/112 (Item 112 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

1994

2/PY/113 (Item 113 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/114 (Item 114 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/115 (Item 115 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/116 (Item 116 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/117 (Item 117 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/118 (Item 118 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/119 (Item 119 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/120 (Item 120 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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Ella Colbert 11/19/99 41

2/PY/121 (Item 121 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/122 (Item 122 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/123 (Item 123 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/124 (Item 124 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/125 (Item 125 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/126 (Item 126 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

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2/PY/127 (Item 127 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

1993

2/PY/128 (Item 1 from file: 654)
DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,984,446

ISSUED: November 16, 1999 (19991116)

2/PY/129 (Item 2 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,972,548

ISSUED: October 26, 1999 (19991026)

2/PY/130 (Item 3 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,908,729

ISSUED: June 01, 1999 (19990601)

2/PY/131 (Item 4 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,867,393

ISSUED: February 02, 1999 (19990202)

2/PY/132 (Item 5 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,866,286

ISSUED: February 02, 1999 (19990202)

2/PY/133 (Item 6 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,858,516

ISSUED: January 12, 1999 (19990112)

2/PY/134 (Item 7 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,856,021

ISSUED: January 05, 1999 (19990105)

2/PY/135 (Item 8 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,838,883

ISSUED: November 17, 1998 (19981117)

2/PY/136 (Item 9 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,827,627

ISSUED: October 27, 1998 (19981027)

2/PY/137 (Item 10 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,826,145

ISSUED: October 20, 1998 (19981020)

2/PY/138 (Item 11 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,824,396

ISSUED: October 20, 1998 (19981020)

2/PY/139 (Item 12 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,790,408

ISSUED: August 04, 1998 (19980804)

2/PY/140 (Item 13 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,789,123

ISSUED: August 04, 1998 (19980804)

2/PY/141 (Item 14 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,765,081

ISSUED: June 09, 1998 (19980609)

2/PY/142 (Item 15 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,748,483

ISSUED: May 05, 1998 (19980505)

2/PY/143 (Item 16 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,740,510

ISSUED: April 14, 1998 (19980414)

2/PY/144 (Item 17 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,728,502

ISSUED: March 17, 1998 (19980317)

2/PY/145 (Item 18 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,696,690

ISSUED: December 09, 1997 (19971209)

2/PY/146 (Item 19 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,644,494

ISSUED: July 01, 1997 (19970701)

2/PY/147 (Item 20 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,576,135

ISSUED: November 19, 1996 (19961119)

2/PY/148 (Item 21 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PATENT NO.: 5,511,685

ISSUED: April 30, 1996 (19960430)

?t 2/ti/24-148

2/TI/24 (Item 24 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Installations. (News Briefs)

2/TI/25 (Item 25 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Color management: new measuring tools appear.(Imprinta, Part III: More Imaging, Systems, Composition and Layout) (Industry Trend or Event)

2/TI/26 (Item 26 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Print pros mob Chicago, Apple shows color server. (Apple's Color Composite and ColorTouch Pro prepress servers debut at the Print 97 trade show in Chicago)(Product Announcement)

2/TI/27 (Item 27 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Imprinta '97, part II: digital presses, imagesetters, scanners, other output. (trade show) (includes related articles on CCD technology and the CIP3 Group's PPF 2.1) (Industry Trend or Event)

2/TI/28 (Item 28 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

PostScript, PDF and Publishing: the view from New York. (Seybold Trade

Show, portable document format) (includes related article on PDF and Quark) (Industry Trend or Event)

2/TI/29 (Item 29 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Agfa to unveil CTP, thermal plates, scanner; Barco to focus on imaging. (at 1997 Imprinta show) (Industry Trend or Event)

2/TI/30 (Item 30 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Letters.(Letter to the Editor)

2/TI/31 (Item 31 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Color printer controllers. (Seybold San Francisco '96 report part II) (Product Announcement)

2/TI/32 (Item 32 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Digital presses: the focus shifts to costs. (Seybold San Francisco '96 report part II) (Product Announcement)

2/TI/33 (Item 33 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo cuts losses; slow U.S. sales hurts results. (Company Financial Information)

2/TI/34 (Item 34 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Highlights from Cebit '97: the global village. (computer exhibition) (Industry Trend or Event)

2/TI/35 (Item 35 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Service bureaus redefine their place in digital world. (includes related article on DXP pre-press shop) (Industry Trend or Event)

2/TI/36 (Item 36 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Pressing issues. (direct-to-press printers) (includes table of product

features and related article on tips)(Buyers Guide)

2/TI/37 (Item 37 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Agfa profits up 20% in '96; revenues up 15%. (Company Financial Information)

2/TI/38 (Item 38 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

A closer look at the new Indigo E- Print 1000+; 77 engineering enhancements. (Product Announcement)

2/TI/39 (Item 39 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

MacWEEK Guide to pre-press: the transition to an all-digital work flow. (pre-press technology innovations) (includes related articles on using scanners and scanning software, on the benefits of digital printing, on payoffs of ISDN and on computer-to-plate systems) (includes product tables)(Buyers Guide)

2/TI/40 (Item 40 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo probes plastic cart printing. (alliance with Perfect Plastic Printing for evaluating Indigo's E- Print 1000+ plastic card printing technology) (Product Information)(Brief Article)

2/TI/41 (Item 41 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Graphics software struggles to embrace both print and electronic media. (Internet software on showcase at Seybold trade show) (includes related article on other publishing developments) (Technology Information)

2/TI/42 (Item 42 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo. (installation of E- Print 1000 digital printers at Catalyst Graphics) (Product Information)(Brief Article)

2/TI/43 (Item 43 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

New imagers, lower short-run color costs drive polyester plate sales. (Agfa SelectPlate, Eskofot DPX-420, Mitsubishi Silver DigiPlate 1800, PrePress PantherPlate/34P and ScanView DotMate 5000CTP) (Product Information)

2/TI/44 (Item 44 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Variable data on digital presses: making progress. (includes related article on variable printing) (Industry Trend or Event)

2/TI/45 (Item 45 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

What's brewing in Tokyo. (Internet access at Tokyo coffee houses)(Latest Word) (Industry Trend or Event)

2/TI/46 (Item 46 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Xeikon enhances digital press, adds glossy look. (DCP/32D)(The Latest Word)(Product Announcement)

2/TI/47 (Item 47 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Who's demanding On Demand? (digital color production printers are showcased at the On Demand trade show) (Industry Trend or Event)

2/TI/48 (Item 48 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo to cut 240 after '95 loss of \$40 million. (240 lay-offs) (Company Financial Information)

2/TI/49 (Item 49 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Direct approach to color printing: short-run demand. (direct digital printing presses) (MacWEEK Special Report: MacWEEK Guide to Short-Run Printing) (Technology Information)

2/TI/50 (Item 50 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo. (installations of its E- Print 1000 Digital Offset Color press) (Company Operations) (Brief Article)

2/TI/51 (Item 51 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Toyo Ink E- Print office in Singapore gets first sale. (Company Business

and Marketing)(Brief Article)

2/TI/52 (Item 52 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo troubles mount as more losses loom. (Company Financial Information)

2/TI/53 (Item 53 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

On-demand printing via the Internet in Japan. (NTT Printech's Online On-Demand Printing Service) (Company Business and Marketing)(Brief Article)

2/TI/54 (Item 54 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Short-run digital color printing.(Seybold San Francisco '95, Part I) (Industry Trend or Event)

2/TI/55 (Item 55 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Staking a claim in publishing's Wild West. (includes related article on one-liners)(Seybold San Francisco '95, Part I) (Industry Trend or Event)

2/TI/56 (Item 56 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo. (E-Print 100 imagesetter recent installations) (Product Information)(Brief Article)

2/TI/57 (Item 57 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

'New Dimension' pursues 'new media' printing with Barco-Xeikon engine. (New Dimension Digital Printing employs Xeikon DCP-1 typesetting system and Barco Graphic's Fast/RIP and PrintStreamer text processing software) (Company Operations)

2/TI/58 (Item 58 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Highlights from the exhibition. (includes related articles on art galleries, publishing, printing and Postscript, and Masters of Media showcase)(special supplement to Seybold San Francisco '95) (Industry Trend or Event)

2/TI/59 (Item 59 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Editors' hot picks. (outstanding products at Seybold San Francisco '95)(special supplement on Seybold San Francisco '95) (Industry Trend or Event)

2/TI/60 (Item 60 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

People. (graphics industry personnel activities)

2/TI/61 (Item 61 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

T/R Systems builds a digital press from color laser printers. (T/R Systems MicroPress)(Product Announcement)

2/TI/62 (Item 62 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo's revenues rise, but stock price drops; the perils of a public company.

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DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

People.

2/TI/64 (Item 64 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Distribute, then print: global networks take demand printing to remote sites.

2/TI/65 (Item 65 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Color systems and software. (Drupa, part III: color - management, workflow, systems, scanners, printers, etc.)

2/TI/66 (Item 66 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Servers, workflow, and managing images, files and data.(Drupa, part III: color - management, workflow, systems, scanners, printers, etc.)

2/TI/67 (Item 67 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Print on demand: AT&T connects with six print industry leaders to develop "anytime, anywhere" print on-demand.

2/TI/68 (Item 68 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Drupa, part II - output: digital presses, computer to plate, imagesetters. (Drupa '95 trade show)

2/TI/69 (Item 69 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Drupa '95 overview: sorting out the hype from reality.

2/TI/70 (Item 70 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Computer-to-press catches on. (imaging hardware)

2/TI/71 (Item 71 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

For the record.(Correction Notice)

2/TI/72 (Item 72 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Digital printing: customization and workflow.(Seybold Seminars Boston '95, Part I)

2/TI/73 (Item 73 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Imagesetters, platesetters and digital presses. (Seybold Seminars Boston '95, Part I)

2/TI/74 (Item 74 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo.(Brief Article)

2/TI/75 (Item 75 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Scitex to show early versions of digital press and computer to plate.

2/TI/76 (Item 76 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Xeikon: the quiet one makes impressive gains with digital press. (DCP-1 digital press) (includes related article about Xeikon)

2/TI/77 (Item 77 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Wright offers full-function fast color software for NT. (Wright Technologies ready to introduce color image-manipulation software)

2/TI/78 (Item 78 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Drupa features Macs in pre-press, print flow.(Drupa95 Trade Show in Dusseldorf, Germany)(Product Announcement)

2/TI/79 (Item 79 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo. (reports three sales of Indigo E-Print 1000 imagesetter)

2/TI/80 (Item 80 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Go directly to press.(direct digital presses)

2/TI/81 (Item 81 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Fast Ethernet speeds pre-press. (faster communications method gaining ground in Mac shops; PCI bus needed for implementation)(Focus on publishing)

2/TI/82 (Item 82 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Oracle adds Open Text for full-text retrieval.

2/TI/83 (Item 83 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Barco's LithoSetters and DigiPress push productivity in color output. (Barco Graphics' imagesetters and computer-to-plate systems) (includes related article about Barco Graphics' monitors)

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Digital color printing in Japan: a report from early users.

2/TI/85 (Item 85 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo expands digital press line to packaging; enhances E- Print 1000. (Indigo's E- Print 1000 imagesetter) (includes related article on Indigo at Drupa)

2/TI/86 (Item 86 from file: 275)

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Desktop technology in bloom at Page '95 in Japan. (desktop publishing conference) (includes related article on trends in Japanese publishing)

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Indigo. (Indigo E-Print 1000 digital imagesetter)(Brief Article)

2/TI/88 (Item 88 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo unveils digital press for packaging. (Indigo Graphic Systems Ltd Omnius imagesetter) (The Latest Word)(Brief Article)

2/TI/89 (Item 89 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo. (E-Print 1000 digital offset color press sales) (Brief Article)

2/TI/90 (Item 90 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo reports shipping 107 E-Prints to 37 sites; backlog on Sept. 30 was 207 units. (Indigo's E-Print 1000 digital presses)

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Indigo. (Omaha Graphics purchases Indigo E-Print 1000) (Brief Article)

2/TI/92 (Item 92 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

High-resolution output devices. (Seybold Special Report: Seybold San Francisco '94, part 1) (Product Announcement)

2/TI/93 (Item 93 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Publishing on the Net sparks industry resurgence. (includes related article on keynote presentations on humor and competition in the publishing industry) (Seybold Special Report: Seybold San Francisco '94, part 1)

2/TI/94 (Item 94 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Color management: focus on ICC standard. (International Color Consortium) (includes related article on conventions for naming products) (Seybold Special Report: Seybold San Francisco '94, part 2) (Product Announcement)

2/TI/95 (Item 95 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo. (installation at Clondalkin Group) (Installations) (Brief Article)

2/TI/96 (Item 96 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo opens Europe headquarters. (Indigo Graphics Systems) (Brief Article)

2/TI/97 (Item 97 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo N.V. (Financial News) (Brief Article)

2/TI/98 (Item 98 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo adds offline RIP, addresses erasability; first European E-Print site goes live. (Indigo Graphic Systems Ltd; raster image processor) (includes related article on the erasure issue)

2/TI/99 (Item 99 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Barco invests in Xeikon; will add DCP-1 to system; Barco RIP to be used in digital press. (the Barco Group buys 8 percent of Belgian digital

printing press manufacturer Xeikon N.V.) (The Latest Word)

2/TI/100 (Item 100 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo. (E-Print 1000 graphics systems installations) (Brief Article)

2/TI/101 (Item 101 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo to go public, values self at \$1 billion; Landa family to keep majority of stocks; no dividend payments expected. (Indigo Ltd and subsidiaries, Indigo NV and Indigo America)

2/TI/102 (Item 102 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Press imposition software. (Seybold Special Report: Seybold Seminars Boston '94, part I) (Product Announcement)

2/TI/103 (Item 103 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Digital presses and digital color copiers. (Seybold Special Report: Seybold Seminars Boston '94, part I) (Product Announcement)

2/TI/104 (Item 104 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo. (sale of E-Print 1000 digital offset color presses) (Brief Article)

2/TI/105 (Item 105 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Comments from Our Readers. (Letter to the Editor)

2/TI/106 (Item 106 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Season's greetings to all.

2/TI/107 (Item 107 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo. (sells first E-Print 1000s system to Bowater PLC)

2/TI/108 (Item 108 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo's ElectroInk found to be erasable. (used in E- Print 1000 digital offset press) (includes related article on top erasable printing ink applications) (The Latest Word)

2/TI/109 (Item 109 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Comments from our readers. (Letter to the Editor)

2/TI/110 (Item 110 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Finding the right niches for electronic printing. (when to use monochrome PostScript laser printers, high-speed color printers or PostScript-offset hybrid technology) (includes related articles on Hardware Wholesalers Inc.'s decision to forego electronic printing and the Heidelberg GTO offset press, the GTO-DI)

2/TI/111 (Item 111 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Japanese 'Seybold Report' printed on Indigo E- Print: believed first commercial publication. (Indigo E- Print 1000 digital offset press)

2/TI/112 (Item 112 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Short-run color devices offer faster, cheaper output. (Intelligent Electronic Printing Systems E-Print 1000; Xeikon NV DCP-1)

2/TI/113 (Item 113 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Finding profit in the short run. (digital printing presses) (includes related articles on the Kodak 1392 digital copier, Lionheart electronic printing system and R.R. Donnelley's use of Xeikon's DCP-1 digital printer)

2/TI/114 (Item 114 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Taking a long look at short-run color. (color printing systems)(Brief Article) (Product Announcement)

2/TI/115 (Item 115 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Editor's tip sheet: what's new at the show? Vendor-by-vendor rundown of interesting new developments. (Special Report on Seybold San Francisco Conference)

2/TI/116 (Item 116 from file: 275) DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Editors' tip sheet: new items to see at the San Francisco show. (includes index to exhibitors) (Special Report on Seybold San Francisco Conference)

2/TI/117 (Item 117 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

A few items to be sure to see. (Special Report on Seybold San Francisco Conference)

2/TI/118 (Item 118 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Japanese move to embrace new technology: two views from IGAS '93. (International Graphics Arts Show) (includes related glossary)

2/TI/119 (Item 119 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Output of all kinds: eclectic print news from IPEX. (printing industry trade show)

2/TI/120 (Item 120 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Agfa's Chromapress: adding value to Xeikon's short-run color printer. (Agfa Corp. introduces Chromapress short-run color printer) (Product Announcement)

2/TI/121 (Item 121 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Color, workflow trigger Seybold San Francisco. (Seybold San Francisco Conference and Exhibition, October 1993)

2/TI/122 (Item 122 from file: 275)
DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

IPEX: short-run color highlights good show. (highlights from prepress trade show in Birmingham, UK)

2/TI/123 (Item 123 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Comments from our readers. (Letter to the Editor)

2/TI/124 (Item 124 from file: 275)

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Digital color printing to shine at IPEX; flurry of new prepress systems also expected at Birmingham event. (The Latest Word)

2/TI/125 (Item 125 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Indigo's E- Print: new generation of offset color printing. (E-Print 1000 sheet-fed digital offset press) (Cover Story) (Product Announcement)

2/TI/126 (Item 126 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Short-run color: Indigo's E-Print 1000 joins emerging market. (new digital sheet-fed, six-color offset press) (summary of featured article)

(Brief Article)

2/TI/127 (Item 127 from file: 275)

DIALOG(R)File 275:(c) 1999 The Gale Group. All rts. reserv.

Gutenberg goes digital. (new plateless color printing presses) (Technology)

2/TI/128 (Item 1 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

COLOR OFFICE PRINTER WITH A HIGH CAPACITY DIGITAL PAGE IMAGE STORE

2/TI/129 (Item 2 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PROCESS FOR FORMING AN IMAGE ON CERAMIC SUBSTRATES

2/TI/130 (Item 3 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PRINTING ON TRANSPARENT FILM

2/TI/131 (Item 4 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PRINTING SYSTEM

2/TI/132 (Item 5 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

COLOR SELECTION BY MIXING PRIMARY TONERS

2/TI/133 (Item 6 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

IMAGING MEDIUM COMPRISING POLYCARBONATE, METHOD OF MAKING, METHOD OF IMAGING, AND IMAGE-BEARING MEDIUM

2/TI/134 (Item 7 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

TONER-RECEPTIVE MEDIA FOR DIGITAL OFFSET PRINTING

2/TI/135 (Item 8 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

COPYING ATTACHMENT FOR DIGITAL PRINTING PRESS

2/TI/136 (Item 9 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

RECEIVING ELEMENT FOR LIQUID TONER-DERIVED INK

2/TI/137 (Item 10 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

ELECTROGRAPHIC PRINTING APPARATUS WITH A LIQUID DEVELOPEMENT SYSTEM

2/TI/138 (Item 11 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

DIGITAL OFFSET PRINTING MEDIA

2/TI/139 (Item 12 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

ERROR RECOVERY IN A PRINTING SYSTEM

2/TI/140 (Item 13 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

LIQUID TONER-DERIVED INK PRINTABLE LABEL

2/TI/141 (Item 14 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

ELECTROSTATOGRAPHIC MULTI-COLOR PRINTER FOR DUPLEX PRINTING ON A WEBTYPE

TONER RECEPTOR MATERIAL

2/TI/142 (Item 15 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PRINTING SYSTEM

2/TI/143 (Item 16 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

ELECTROSTATOGRAPHIC MULTICOLOUR PRINTING APPARATUS FOR SINGLE PASS SEOUENTIAL DUPLEX PRINTING ON A WEB-TYPE TONER RECEPTOR MATERIAL

2/TI/144 (Item 17 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

IMAGING MEDIUM, METHOD OF IMAGING SAID MEDIUM, AND IMAGE-BEARING MEDIUM

2/TI/145 (Item 18 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

SHEET STACKING APPARATUS

2/TI/146 (Item 19 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PRINTING SYSTEM

2/TI/147 (Item 20 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

PROCESSING METHOD BASED ON RESIST PATTERN FORMATION, AND RESIST PATTERN FORMING APPARATUS

2/TI/148 (Item 21 from file: 654)

DIALOG(R)File 654:(c) format only 1999 The Dialog Corp. All rts. reserv.

MUG SIMULATING A HELMET AND HELMET WEARER ?t 2/2,ab,kwic/53,56

2/2, AB, KWIC/53 (Item 53 from file: 275)

DIALOG(R)File 275: Gale Group Computer DB(TM)

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01880350 SUPPLIER NUMBER: 17858444 (USE FORMAT 7 OR 9 FOR FULL TEXT)

On-demand printing via the Internet in Japan. (NTT Printech's Online On-Demand Printing Service) (Company Business and Marketing)(Brief Article)

Seybold Report on Publishing Systems, v25, n7, p22(1)

Dec 11, 1995

DOCUMENT TYPE: Brief Article ISSN: 0736-7260 LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 301 LINE COUNT: 00027

COMPANY NAMES: NTT Printech-Services

DESCRIPTORS: Company Service Introduction; Printing Industry

SIC CODES: 4822 Telegraph & other communications

FILE SEGMENT: CD File 275

... a server for output to a Xerox DocuTech. Color jobs will be printed on an Indigo E-Print 1000, but they won't be transmitted over the Internet because broadband ISDN networks aren...

...short-run printing business. However, it recently installed a network server for DocuTech and an E-Print for adding color services. The printer had two reasons for making those investments in spite...

2/2,AB,KWIC/56 (Item 56 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

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01854432 SUPPLIER NUMBER: 17446542 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Indigo. (E-Print 100 imagesetter recent installations) (Product

Information)(Brief Article)

Seybold Report on Publishing Systems, v25, n3, p26(1)

Oct 9, 1995

DOCUMENT TYPE: Brief Article ISSN: 0736-7260 LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 279 LINE COUNT: 00028

SPECIAL FEATURES: illustration; photograph COMPANY NAMES: Indigo Ltd.--Distribution DESCRIPTORS: Imagesetter; Product Distribution

SIC CODES: 3577 Computer peripheral equipment, not elsewhere classified

TRADE NAMES: Indigo E -Print 1000 (Imagesetter)--Distribution

FILE SEGMENT: CD File 275

Indigo. (E-Print 100 imagesetter recent installations) (Product Information)(Brief Article)

TEXT:

Indigo has announced these installations of E -Print 1000 systems in recent months:

.. show handouts and other jobs.

* Fox Valley (Neenah, WI), for providing services to commercial printers

Indigo also announced the sale of an Omnius system for packaging and label production to Widen...

...expected to be used for runs of up to 2,000. Widen already has two E - Print 1000s for production of catalogs, retail collateral, point-of-purchase items, real-estate sales material...

COMPANY NAMES: Indigo Ltd...

TRADE NAMES: Indigo E -Print 1000 (Imagesetter...

?t /2,ab,kwic/38,40,42

2/2, AB, KWIC/38 (Item 38 from file: 275)

DIALOG(R)File 275: Gale Group Computer DB(TM)

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02018657 SUPPLIER NUMBER: 18957711 (USE FORMAT 7 OR 9 FOR FULL TEXT)

A closer look at the new Indigo E- Print 1000+; 77 engineering

enhancements.(Product Announcement)

Seybold Report on Publishing Systems, v26, n6, p38(1)

Nov 30, 1996

DOCUMENT TYPE: Product Announcement ISSN: 0736-7260 LANGUAGE:

English RECORD TYPE: Fulltext

WORD COUNT: 866 LINE COUNT: 00069

COMPANY NAMES: Indigo -- Product enhancement

DESCRIPTORS: Hardware Product Enhancement

SIC CODES: 3571 Electronic computers

TRADE NAMES: Indigo E-Print 1000 (Imagesetter)--Product enhancement

FILE SEGMENT: CD File 275

A closer look at the new Indigo E- Print 1000+; 77 engineering enhancements. (Product Announcement)

We covered the new Indigo E-Print 1000+ at Seybold San Francisco, where it was given a worldwide debut, but we recently...

...machine.

In essence, it is a new packaging of what has been happening to the E - Print 1000 since its launch. It includes a claimed 77 engineering enhancements aimed at improving reliability...

... operation. These changes are being made at no incremental cost to the installed base of E - Print 1000 customers.

Consumables prices drop. Indigo has made a real effort to rationalize the pricing of consumables, in particular the cost...

...the ElectroInk liquid toner. At the time of the initial product launch, ElectroInk for the E - Print cost \$115 per can, although it was often heavily discounted. The new procedure drops such...

...can be applied.

New-generation ink. There's more news on the ink front, though. Indigo has released a new generation of ElectroInk that conforms to Eurostandard specifications. These inks have an enhanced level of gloss, resulting in higher quality, according to Indigo, which brings it to the level of most offset printing. Significantly, though, it offers the...

...and a larger color gamut than is possible with wet offset litho printing.

The new Indigo ink comes in a can that prints up to 30% more pages than the previous ink.

Indigo has announced the commercial release of white ElectroInk, which is intended for use as a...

...substrates are offered by most of the industry vendors for use with the Omnius and E -print 1000+ presses. Indigo says that 39 optimized substrates are now available for the Omnius.

New plate. Indigo also has improved the photo imaging plate, the E-Print 's reusable printing plate. It provides improved on-press performance, higher quality and an appreciable...

...the reusable plate are claimed to have reduced consumables costs by around 50%.

EFI controller. Indigo announced an agreement with Electronics for Imaging to use the EFI Fiery XJ+ RIP to drive the 1000+ and Omnius. Indigo also announced that it will support the forthcoming Level 3 PostScript on its own E-RIP. It will allow users to select either the EFI or Indigo RIP to drive an Indigo engine.

Going forward. The recent announcements by Indigo reinforce the idea that digital color printing is a proven and acceptable technology. Indigo is now introducing support technology for its customers to help build awareness of what can...

...Kiosk. This is a tool enabling visitors to design business stationery for printing on an E-Print 1000+. In the future, these kiosks will be linked to Indigo users.

Sales. Indigo no longer discloses the number of systems it has installed. This is a new policy instigated by the organization's new CEO, Wayland Hicks. Instead, Indigo talks about how much more efficiently the installed systems are being used. For example, Indigo says the average number of impressions per installed E -Print 1000 machine worldwide has doubled over the past 12 months. In the U.S. this...

...The bottom line. The digital printing market has required more time to take off than Indigo originally thought it would, and the company's expensive initial sales approach caused it to...

...haven't seen black ink on their books for a long time, it appears that Indigo is taking some significant steps to emerge intact from its troubled period. It still has...

...certain extent, it is at the mercy of market that hasn't yet solidified. But Indigo has undergone some important, and painful, restructuring, and it has enhanced it products and moderated...

COMPANY NAMES: Indigo --

TRADE NAMES: Indigo E -Print 1000 (Imagesetter...

2/2,AB,KWIC/40 (Item 40 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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02007070 SUPPLIER NUMBER: 18855063 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Indigo probes plastic cart printing. (alliance with Perfect Plastic Printing for evaluating Indigo's E-Print 1000+ plastic card printing technology) (Product Information)(Brief Article) Seybold Report on Publishing Systems, v25, n4, p2(1)

Oct 28, 1996

DOCUMENT TYPE: Brief Article ISSN: 0736-7260 LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 26 LINE COUNT: 00005

COMPANY NAMES: Indigo N.V.--Contracts; Perfect Plastic Printing Corp.--

Contracts

DESCRIPTORS: Product Application; Imagesetter

SIC CODES: 3577 Computer peripheral equipment, not elsewhere classified

TRADE NAMES: Indigo E -Print 1000 (Imagesetter)--Usage

FILE SEGMENT: CD File 275

Indigo probes plastic cart printing. (alliance with Perfect Plastic Printing for evaluating Indigo's E- Print 1000+ plastic card printing technology) (Product Information)(Brief Article) TEXT:

Indigo has announced an alliance with Perfect Plastic Printing (St. Charles, IL) to evaluate Indigo 's E-Print 1000+ for printing high-quality plastic cards.

COMPANY NAMES: Indigo N.V...

TRADE NAMES: Indigo E-Print 1000 (Imagesetter...

2/2,AB,KWIC/42 (Item 42 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

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01989027 SUPPLIER NUMBER: 18686773 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Indigo. (installation of E- Print 1000 digital printers at Catalyst

Graphics) (Product Information)(Brief Article)

Seybold Report on Publishing Systems, v26, n1, p26(1)

Sep 9, 1996

DOCUMENT TYPE: Brief Article ISSN: 0736-7260 LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 132 LINE COUNT: 00013

COMPANY NAMES: Indigo -- Products

DESCRIPTORS: Product Application; Imagesetter

SIC CODES: 3577 Computer peripheral equipment, not elsewhere classified

TRADE NAMES: Indigo E-Print 1000 (Imagesetter)--Marketing

FILE SEGMENT: CD File 275

Indigo. (installation of E- Print 1000 digital printers at Catalyst

Graphics) (Product Information)(Brief Article)

TEXT:

Indigo reports installing E-Print 1000 digital printers at Catalyst Graphics (North Huntingdon, PA), which was started by a group...

COMPANY NAMES: Indigo --TRADE NAMES: Indigo E -Print 1000 (Imagesetter... ?t 2/9/38,40,42,53,56

2/9/38 (Item 38 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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